

REPUBLIC OF FRANCE

NATIONAL INSTITUTE
OF
INDUSTRIAL PROPERTY

SEARCH REPORT

prepared on the basis of the latest
claims filed before the search was started

National Registration No.:

FA 585942
FR 0005639

| DOCUMENTS CONSIDERED PERTINENT | | Claims concerned of the examined application | |
|----------------------------------|--|---|---|
| Category | Documents cited stating pertinent parts where necessary | | |
| X | US 4 339 874 (MC CARTY FREDRICK B ET AL) July 20, 1982 (07-20-1982) | 1-5 18-21 | H02K1/28 H02K21/14 |
| Y | * column 1, line 55 - line 61, figure 1* *column 2, line 64 - line 66* *column 3, line 32 - line 39; claim 1* | 6-8, 12, 13 | |
| Y | FR 2 655 784 A (ALSTHOM GEC) June 14, 1991 (06-14-1991) | 6-8 | |
| A | *column 1, line 1 - line 2; figures 1-3, 5* *column 5, line 13 - line 17* | 14-16 | |
| Y | US 5 162 686 A (ROYER LAURENT) November 10, 1992 (11-10-1992) *column 1, line 1 - line 3; figures 2, 5* *column 2, line 58 - line 60* | 12, 13 | |
| A | EP 0 143 693 A (FRANKLIN ELECTRIC CO INC) June 5, 1985 (06-05-1985) *abstract; figure 11* | 9, 10 | Search Classes (Int. Cl. Int. CL.7) H02K |
| Date of Search: January 22, 2001 | | Examiner: Contreras Sampayo, J | |
| CATEGORIES OF DOCUMENTS CITED | | | |
| X: | particularly pertinent by itself | T: | theory or principle at the basis of the invention |
| Y: | particularly pertinent in combination with another document in the same category | E: | patent document benefiting from a date prior to the filing date which was not published until this filing date or a subsequent date |
| A: | pertinent to at least one claim or general technological background | D: | cited in application |
| O: | unwritten disclosure | L: | cited for other reason |
| P: | intervening document | &: | members of the same family, corresponding document |

Search Classes
(Int. Cl. Int. CL.7)
H02K

APPENDIX TO SEARCH REPORT FOR FRENCH PATENT APPLICATION NO.

FA 585942

FR 0005639

This appendix gives the members of the family of patents relating to the patent documents cited in the above-identified search report. These members were contained in the database of the European Patent Office as of January 22, 2001. The information supplied is for information only and neither the European Patent Office nor the French Government incurs any liability thereunder.

| Patent Document Cited in Search Report | Publication Date | Member(s) of Patent Family | Publication Date |
|---|------------------|--|--|
| US 4339874 A | 07-20-1982 | US 4242610 A AT 23006 T DE 2967628 D EP 0013157 A | 12-30-1980 11-15-1986 11-20-1986 07-09-1980 |
| FR 2655784 A | 06-14-1991 | AT 102765 T DE 69007244 D DE 69007244 T DK 431514 T EP 0431514 A ES 2050917 T JP 4340340 A US 5091668 A | 03-15-1994 04-14-1994 06-16-1994 06-20-1994 06-12-1991 06-01-1994 11-26-1992 02-25-1992 |
| US 5162686 A | 11-10-1992 | FR 2655214 A AT 102764 T DE 69007243 D DE 69007243 T DK 430795 T EP 0430795 A ES 2052216 T WO 9108607 A JP 7057075 B JP 4500450 T | 05-31-1991 03-15-1994 04-14-1994 06-16-1994 07-04-1994 06-05-1991 07-01-1994 06-13-1991 06-14-1995 01-23-1992 |
| EP 0143693 A | 06-05-1985 | AUCUN | |

EUROPEAN PATENT OFFICE

Application No.:

EUROPEAN SEARCH REPORT

EP 01 40 0981

| DOCUMENTS CONSIDERED PERTINENT | | | |
|--------------------------------|---|--|--|
| Category | Documents cited stating pertinent parts where necessary | Claims concerned of the examined application | Classification of the application (Int. Cl.) |
| X | US 5 841 212 A (MITA MASAHIRO ET AL) November 24, 1998 (1998-11-24) *Abstract; Figures 1, 2* | 1 | H02K1/27 H02K1/14 H02K21/16 H02K1/18 |
| X | EP 0 872 943 A (JAPAN SERVO) October 21, 1998 (1998-10-21) *Column 2, line 5 - 12; figures 2, 6* *Column 2, line 28 - line 50* | 1, 4 | H02K11/00 H02K29/08 H02K3/18 H02K3/52 |
| X | FR 2 784 815 A (VALEO EQUIP ELECTR MOTEUR) April 21, 2000 (2000-04-21) *Abstract; figures 1, 3* *Page 1, line 1 - line 5* *Page 1, line 15 - line 21* *Page 6, line 6 - line 27* | 1, 2, 13 | |
| X | EP 0 365 689 A (FANUC LTD) May 2, 1990 (1990-05-02) *Abstract; figure 8* *Page 1, line 33 - page 2, line 16* *Page 6, line 27 - page 7, line 33* | 1, 2, 13 | |
| X | WEINMANN D: "APPLICATION OF NDFEB-MAGNETS IN MOTORS" REVUE GENERALE DE L'ELECTRICITE, FR, RGE. PARIS, no. 4, April 1, 1991 (1991-04-01), pages 45-51, XP000227187 ISSN: 0035-3116 | 1 | |
| A | *Abstract; figure 2B* | 9-12 | |
| X | EP 0 438 594 A (FANUC LTD) July 31, 1991 (1991-07-31) *column 3, line 20 - line 22; figure 4* | 1, 13, 14 | |
| X | US 5 162 686 A (ROYER LAURENT) November 10, 1992 (1992-11-10) | 1, 5, 13 | |
| A | *Abstract; figures 1, 5, 6* *Column 2, line 7 - line 17* | 6, 7, 9-12 | |
| X | US 5 091 668 A (BENDAHDANE BOUZIANE ET AL) February 25, 1992 (1992-02-25) *column 2, line 1 - line 5; figure 4* | 1, 5, 8 | |
| | | | Search Classes (Int. Cl. 7) |
| | | | H02K |

| | | | | | | | | | | | | | |
|--|--|---------------------------------|----------------------------------|-------------------------------------|--|---|--|--|-------------------------|-------------------------|---------------------------|-------------------------|---|
| X | EP 0 866 540 A (ELECTRIC BOAT CORP) September 23, 1998 (1998-09-23) *Abstract; figures 4, 1, 2* *Column 3, line 44 - line 55* *Column 5, line 14 - line 20* | 1, 5-7,14 | | | | | | | | | | | |
| X | PATENT ABSTRACTS OF JAPAN vol. 2000, no. 8, October 6, 2000 (2000-10-06) & JP 2000 152537 A (CONCEPTION & AMP; DEV MICHELIN SA), May 30, 2000 (2000-05-30) *Abstract* | 1, 16 | | | | | | | | | | | |
| The present search report is established for all claims | | | | | | | | | | | | | |
| Place of Search LA HAYE | | Date of Search July 11, 2001 | Examiner Contreras Sampayo, J | | | | | | | | | | |
| <p>CATEGORIES OF DOCUMENTS CITED</p> <table> <tr> <td>X: particularly pertinent by itself</td> <td>T: theory or principle at the basis of the invention</td> </tr> <tr> <td>Y: particularly pertinent in combination with another document in the same category</td> <td>E: patent document benefiting from a date prior to the filing date which was not published until this filing date or a subsequent date</td> </tr> <tr> <td>A: pertinent to at least one claim or general technological background</td> <td>D: cited in application</td> </tr> <tr> <td>O: unwritten disclosure</td> <td>L: cited for other reason</td> </tr> <tr> <td>P: intervening document</td> <td>&: members of the same family, corresponding document</td> </tr> </table> | | | | X: particularly pertinent by itself | T: theory or principle at the basis of the invention | Y: particularly pertinent in combination with another document in the same category | E: patent document benefiting from a date prior to the filing date which was not published until this filing date or a subsequent date | A: pertinent to at least one claim or general technological background | D: cited in application | O: unwritten disclosure | L: cited for other reason | P: intervening document | &: members of the same family, corresponding document |
| X: particularly pertinent by itself | T: theory or principle at the basis of the invention | | | | | | | | | | | | |
| Y: particularly pertinent in combination with another document in the same category | E: patent document benefiting from a date prior to the filing date which was not published until this filing date or a subsequent date | | | | | | | | | | | | |
| A: pertinent to at least one claim or general technological background | D: cited in application | | | | | | | | | | | | |
| O: unwritten disclosure | L: cited for other reason | | | | | | | | | | | | |
| P: intervening document | &: members of the same family, corresponding document | | | | | | | | | | | | |

APPENDIX TO SEARCH REPORT FOR EUROPEAN PATENT APPLICATION NO.

EP 01 40 0981

This appendix gives the members of the family of patents relating to the patent documents cited in the above-identified search report. These members were contained in the database of the European Patent Office as of
The information supplied is for information only and the European Patent Office does not incur any liability thereunder.

| Patent Document Cited in Search Report | Publication Date | Member(s) of Patent Family | Publication Date |
|---|------------------|-------------------------------|------------------|
| US 5841212 A | 11-24-1998 | JP 9285050 A | 10-31-1997 |
| EP 0872943 A | 10-21-1998 | JP 11004553 A | 01-06-1999 |
| | | TW 380329 B | 01-21-2000 |
| FR 2784815 A | 04-21-2000 | AUCUN | |
| EP 0365689 A | 05-02-1990 | JP 1278247 A | 11-08-1989 |
| | | DE 68904728 D | 03-18-1993 |
| | | DE 68904728 T | 09-02-1993 |
| | | WO 8910653 A | 11-02-1989 |
| | | KR 9200685 B | 01-20-1992 |
| EP 0438594 A | 07-31-1991 | JP 3032333 A | 02-12-1991 |
| | | DE 69015606 D | 02-09-1995 |
| | | DE 69015606 T | 08-24-1995 |
| | | WO 9100638 A | 01-10-1991 |
| US 5162686 A | 11-10-1992 | US 5157297 A | 10-20-1992 |
| | | FR 2655214 A | 05-31-1991 |
| | | AT 102764 T | 03-15-1994 |
| | | DE 69007243 D | 04-14-1994 |
| | | DE 69007243 T | 06-16-1994 |
| | | DK 430795 T | 07-04-1994 |
| | | EP 0430795 A | 06-05-1991 |
| | | ES 2052216 T | 07-01-1994 |
| | | WO 9108607 A | 06-13-1991 |
| | | JP 7057075 B | 06-14-1995 |
| US 5091668 A | 02-25-1992 | JP 4500450 T | 01-23-1992 |
| | | FR 2655784 A | 06-14-1991 |
| | | AT 102765 T | 03-15-1994 |
| | | DE 69007244 D | 04-14-1994 |
| | | DE 69007244 T | 06-16-1994 |
| | | DK 431514 T | 06-20-1994 |
| | | EP 0431514 A | 06-12-1991 |
| | | ES 2050917 T | 06-01-1994 |
| | | JP 4340340 A | 11-26-1992 |
| EP 0866540 A | 09-23-1998 | US 5952755 A | 09-14-1999 |
| | | JP 10327548 A | 12-08-1998 |
| JP 2000152537 A | 05-30-2000 | EP 1001507 A | 05-17-2000 |

For all information concerned with this Annex: See Official Journal of European Patent Office No. 12/82.

EUROPEAN PATENT OFFICE

EUROPEAN SEARCH REPORT

Application No.:

EP 02 29 1384

| DOCUMENTS CONSIDERED PERTINENT | | | |
|---|--|--|---|
| Category | Documents cited stating pertinent parts where necessary | Claims concerned of the examined application | Classification of the application (Int. Cl. 7) |
| X | US 4 339 874 A (MC CARTY FREDERICK B ET AL) 20 July 1982 (1982-07-20) | 1 | H02K1/27 |
| Y | *column 1, line 55-line 61; figure 1 * | 2-5,10,12,13 | H02K1/14 |
| | *column 2, line 64-line 66* | | H02K21/16 |
| | *column 3, line 32-line 39* | | H02K1/18 |
| | *claim 1* | | H02K11/00 |
| Y | FR 2 784 815 A (VALEO EQUIP ELECTR MOTEUR) 21 April 2000 (2000-04-21) | 2 | H02K29/08 |
| | *abstract; figures 1,3* | | H02K3/18 |
| | *page 1, line 1-line 5* | | H02K3/52 |
| | *page 1, line 15-line 21* | | H02K15/03 |
| | *page 6, line 6-line 27* | | |
| Y | US 5 162 686 A (ROYER LAURENT) 10 November 1992 (1992-11-10) | 3-5,10 | |
| | *abstract; figures 1,5,6* | | |
| | *column 2, line 7-line 17* | | |
| Y | EP 0 438 594 A (FANUC LTD) 31 July 1991 (1991-07-31) | 12,13 | |
| | *column 3, line 20-line 22; figure 4 | | |
| | * | | |
| A | US 5 091 668 A (BENDAHMANE BOUZIANE ET AL) 25 February 1992 (1992-02-25) | | Search Classes (Int. Cl. 7) |
| | *column 2, line 1-line 5; figure 4* | | H02K |
| A | PATENT ABSTRACTS OF JAPAN Vol. 2000, no. 08, 6 October 2000 (2000-10-06) | 13 | |
| | & JP 2000 152537 A (CONCEPTION &DEV MICHELIN SA), 30 May 2000 (2000-05-30) | | |
| | *abstract* | | |
| The present search report is established for all claims | | | |
| Place of Search | | Date of Search | Examiner |
| La Haye | | 16 August 2002 | Contreras Sampayo, J |
| CATEGORIES OF DOCUMENTS CITED | | | |
| X: | particularly pertinent by itself | T: | theory or principle at the basis of the invention |
| Y: | particularly pertinent in combination with another document in the same category | E: | patent document benefiting from a date prior to the filing date which was not published until this filing date or a subsequent date |
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APPENDIX TO SEARCH REPORT FOR EUROPEAN PATENT APPLICATION NO.

EP 02 29 1384

This appendix gives the members of the family of patents relating to the patent documents cited in the above-identified search report. These members were contained in the database of the European Patent Office as of 16 August 2002. The information supplied is for information only and the European Patent Office does not incur any liability thereunder.

| Patent Document Cited in Search Report | Publication Date | Member(s) of Patent Family | Publication Date |
|---|------------------|---|--|
| US 4339874 A | 20-07-1982 | US 4242610 A AT 23006 T DE 2967628 D1 EP 0013157 A1 | 30-12-1980 15-11-1986 20-11-1986 09-07-1980 |
| FR 2784815 A | 21-04-2000 | FR 2784815 A1 | 21-04-2000 |
| US 5162686 A | 10-11-1992 | FR 2655214 A1 AT 102764 T DE 69007243 D1 DE 69007243 T2 DK 430795 T3 EP 0430795 A1 ES 2052216 T3 WO 9108607 A1 JP 7057075 B JP 4500450 T | 31-05-1991 15-03-1994 14-04-1994 16-06-1994 04-07-1994 05-06-1991 01-07-1994 13-06-1991 14-06-1995 23-01-1992 |
| EP 0438594 A | 31-07-1991 | JP 3032333 A DE 69015606 D1 DE 69015606 T2 EP 0438594 A1 WO 9100638 A1 US 5157297 A | 12-02-1991 09-02-1995 24-08-1995 31-07-1991 10-01-1991 20-10-1992 |
| US 5091668 A | 25-02-1992 | FR 2655784 A1 AT 102765 T DE 69007244 D1 DE 69007244 T2 DK 431514 T3 EP 0431514 A1 ES 2050917 T3 JP 4340340 A | 14-06-1991 15-03-1994 14-04-1994 16-06-1994 20-06-1994 12-06-1991 01-06-1994 26-11-1992 |
| JP 2000152537 A | 30-05-2000 | EP 1001507 A1 US 2002047424 A1 | 17-05-2000 25-04-2002 |

REPUBLIC OF FRANCE

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SEARCH REPORT

prepared on the basis of the latest
claims filed before the search was started

National Registration No.:

FA 604680

FR 0108933

| DOCUMENTS CONSIDERED PERTINENT | | Claims concerned of the examined application | |
|----------------------------------|--|---|---|
| Category | Documents cited stating pertinent parts where necessary | | |
| X | EP 0 669 699 A (FICHTEL & SACHS AG) 30 August 1995 (1995-08-30) | 1-7 | H02K1/14 |
| Y | *abstract; claims 1,2,10; figure 1 * | 8-10 | H02K3/38 H02K15/02 H02K21/14 |
| X | DE 195 03 610 A (ZAJC FRANC ;ZAJC IVICA (SI)) 14 August 1996 (1996-08-14) *column 7, line 28-line 33* *column 7, line 54-line 63* *figure 7* | 1,4,6,7 | Search Classes (Int. Cl. 7) |
| Y | DE 199 03 409 C (SYSTEM ANTRIEBSTECHNIK DRESDEN) 20 July 2000 (2000-07-20) *abstract* *figure* | 8,10 | H02K B60K |
| Y | PATENT ABSTRACTS OF JAPAN Vol. 2000, no. 14, 5 March 2001 (2001-03-05) -& JP 2000 333407 A (TADA SEIICHI;AKATANI MASAMI), 30 November 2000 (2000-11-30) *abstract; figures 1,2* | 9 | |
| Date of Search: 17 December 2001 | | Examiner: Contreras Sampayo, J | |
| CATEGORIES OF DOCUMENTS CITED | | | |
| X: | particularly pertinent by itself | T: | theory or principle at the basis of the invention |
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FR 0108933
FA 604680

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| Patent Document Cited in Search Report | Publication Date | Member(s) of Patent Family | Publication Date |
|---|------------------|---|--|
| EP 0669699 A | 30-08-1995 | DE 4406471 A1 BR 9404789 A EP 0669699A1 JP 7264793 A | 21-09-1995 24-10-1995 30-08-1995 13-10-1995 |
| DE 19503610 A | 14-08-1996 | DE 19503610 A1 JP 8265996 A US 5744888 A | 14-08-1996 11-10-1996 28-04-1998 |
| DE 19903409 C | 20-07-2000 | DE 19903409 C1 | 20-07-2000 |
| JP 2000333407 A | 30-11-2000 | NONE | |

REPUBLIC OF FRANCE

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SEARCH REPORT

prepared on the basis of the latest
claims filed before the search was started

National Registration No.:

FA 601594

FR 0105187

| DOCUMENTS CONSIDERED PERTINENT | | Claims concerned of the examined application | |
|---------------------------------|--|---|---|
| Category | Documents cited stating pertinent parts where necessary | | |
| A | EP 0 777 312 A (MULFINGEN ELEKTROBAU EBM) 4 June 1997 (1997-06-04) * column 4, line 14 - line 26 * * column 5, line 29 - line 42 * * column 6, line 44 - line 46; figures 2, 7 * | 1 | H02K1/14 H02K3/38 H02K15/02 H02K21/14 |
| A | EP 1 050 948 A (MANNESMANN SACHS AG) 8 November 2000 (2000-11-08) * claim 1; figure 1 * | 1 | |
| A | DE 700 420 C (SIEMENS) 21 November 1940 (1940-11-21) * figures 1, 2 * | 3 | Search Classes (Int. Cl. 7) H02K B60K |
| A | PATENT ABSTRACTS OF JAPAN vol. 1998, no. 10, 31 August 1998 (1998-08-31) - & JP 10 126990 A (HITACHI LTD), 15 May 1998 (1998-05-15) * abstract; figures 2, 6C * | 4, 5 | |
| A | EP 0 872 943 A (JAPAN SERVO) 21 October 1998 (1998-10-21) * figures 2, 3 * | 8 | |
| Date of Search: 17 January 2002 | | Examiner: Contreras Sampayo, J | |
| CATEGORIES OF DOCUMENTS CITED | | | |
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| P: | intervening document | &: | members of the same family, corresponding document |

APPENDIX TO SEARCH REPORT FOR FRENCH PATENT APPLICATION NO.

FA 601594
FR 0105187

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| Patent Document Cited in Search Report | Publication Date | Member(s) of Patent Family | Publication Date |
|---|------------------|---|--|
| EP 0777312 A | 04-06-1997 | DE 19544830 A1 DE 59606820 D1 EP 0777312 A2 US 5828147 A | 05-06-1997 31-05-2001 04-06-1997 27-10-1998 |
| EP 1050948 A | 08-11-2000 | DE 19920127 A1 EP 1050948 A2 JP 2000333418 A | 16-11-2000 08-11-2000 30-11-2000 |
| DE 700420 C | | NONE | |
| JP 10126990 A | 15-05-1998 | NONE | |
| EP 0872943 A | 21-10-1998 | EP 0872943 A1 JP 11004553 A TW 380329 B US 6335582 B1 | 21-10-1998 06-01-1999 21-01-2000 01-01-2002 |

REPUBLIC OF FRANCE

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SEARCH REPORT

prepared on the basis of the latest
claims filed before the search was started

National Registration No.:

FA 601596
FR 0105189

| DOCUMENTS CONSIDERED PERTINENT | | Claims concerned of the examined application | |
|---------------------------------|---|---|---|
| Category | Documents cited stating pertinent parts where necessary | | |
| X | GB 258 981 A (BRITISH LIGHTING AND IGNITION; JAMES COCHRANE HUTTON) 7 October 1926 (1926-10-07) | 1,4,9 | H02K1/14 H02K21/16 |
| Y | * page 1, line 25 - line 37 * | 2,3,5-8 10 | |
| A | * page 1, line 46 - line 50 * | | |
| | * page 1, line 58 * | | |
| | * page 1, line 74 - line 79 * | | |
| | * page 2, line 49 - line 72; figure 1 * | | |
| Y | US 5 729 072 A (KIKUCHI SEIJI ET AL) 17 March 1998 (1998-03-17) * column 4, line 48 - line 60 * * column 6, line 25 - line 28; figure 2 * | 2,3 | Search Classes (Int. Cl. 7) H02K |
| Y | DE 700 420 C (SIEMENS) 21 November 1940 (1940-11-21) * figure 2 * | 5,6 | |
| Y | EP 0 872 943 A (JAPAN SERVO) 21 October 1998 (1998-10-21) * abstract; figure 2 * | 7,8 | |
| A | PATENT ABSTRACTS OF JAPAN vol. 1995, no. 07, 31 August 1995 (1995-08-31) -& JP 07 107707 A (SHIBAURA ENG WORKS CO LTD), 21 April 1995 (1995-04-21) * abstract; figures 1,2 * | 10 | |
| Date of Search: 29 January 2002 | | Examiner: Contreras Sampayo, J | |
| CATEGORIES OF DOCUMENTS CITED | | | |
| X: | particularly pertinent by itself | T: | theory or principle at the basis of the invention |
| Y: | particularly pertinent in combination with another document in the same category | E: | patent document benefiting from a date prior to the filing date which was not published until this filing date or a subsequent date |
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| P: | intervening document | &: | members of the same family, corresponding document |

APPENDIX TO SEARCH REPORT FOR FRENCH PATENT APPLICATION NO.

FA 0105189

FR 601596

This appendix gives the members of the family of patents relating to the patent documents cited in the above-identified search report.

These members were contained in the database of the European Patent Office as of 29-01-2002

The information supplied is for information only and neither the European Patent Office nor the French Government incurs any liability thereunder.

| Patent Document Cited in Search Report | Publication Date | Member(s) of Patent Family | Publication Date |
|---|------------------|--|--|
| GB 258981 A | 07-10-1926 | NONE | |
| US 5729072 A | 17-03-1998 | JP 6105487 A | 15-04-1994 |
| DE 700420 C | | NONE | |
| EP 0872943 A | 21-10-1998 | EP 0872943 A1 JP 11004553 A TW 380329 B US 6335582 B1 | 21-10-1998 06-01-1999 21-01-2000 01-01-2002 |
| JP 07107707 A | 21-04-1995 | NONE | |

EUROPEAN PATENT OFFICE

Application No.:

EUROPEAN SEARCH REPORT

EP 02 29 0956

| DOCUMENTS CONSIDERED PERTINENT | | | | | | | | | | | | | |
|---|---|--|--|-------------------------------------|--|---|--|--|-------------------------|-------------------------|---------------------------|-------------------------|---|
| Category | Documents cited stating pertinent parts where necessary | Claims concerned of the examined application | Classification of the application (Int. Cl. 7) | | | | | | | | | | |
| A | EP 0 777 312 A (MULFINGEN ELEKTROBAU EBM) 4 June 1997 (1997-06-04) * column 4, line 14 - line 26 * * column 5, line 29 - line 42 * * column 6, line 44 - line 46; figures 2, 7 * | 1 | H02K3/18 H02K3/52 | | | | | | | | | | |
| A | EP 1 050 948 A (MANNESMANN SACHS AG) 8 November 2000 (2000-11-08) * claim 1; figure 1 * | 1 | | | | | | | | | | | |
| A | DE 700 420 C (SIEMENS) 21 November 1940 (1940-11-21) * figures 1, 2 * | 3 | | | | | | | | | | | |
| A | PATENT ABSTRACTS OF JAPAN vol. 1998, no. 10, 31 August 1998 (1998-08-31) - & JP 10 126990 A (HITACHI LTD), 15 May 1998 (1998-05-15) * abstract; figures 2, 6C * | 4, 5 | | | | | | | | | | | |
| A | EP 0 872 943 A (JAPAN SERVO) 21 October 1998 (1998-10-21) * figures 2, 3 * | 8 | | | | | | | | | | | |
| | | | Search Classes (Int. Cl. 7) H02K B60K | | | | | | | | | | |
| The present search report is established for all claims | | | | | | | | | | | | | |
| Place of Search LA HAYE | | Date of Search 26 June 2002 | Examiner Contreras Sampayo, J | | | | | | | | | | |
| <p>CATEGORIES OF DOCUMENTS CITED</p> <table border="0"> <tr> <td>X: particularly pertinent by itself</td> <td>T: theory or principle at the basis of the invention</td> </tr> <tr> <td>Y: particularly pertinent in combination with another document in the same category</td> <td>E: patent document benefiting from a date prior to the filing date which was not published until this filing date or a subsequent date</td> </tr> <tr> <td>A: pertinent to at least one claim or general technological background</td> <td>D: cited in application</td> </tr> <tr> <td>O: unwritten disclosure</td> <td>L: cited for other reason</td> </tr> <tr> <td>P: intervening document</td> <td>&: members of the same family, corresponding document</td> </tr> </table> | | | | X: particularly pertinent by itself | T: theory or principle at the basis of the invention | Y: particularly pertinent in combination with another document in the same category | E: patent document benefiting from a date prior to the filing date which was not published until this filing date or a subsequent date | A: pertinent to at least one claim or general technological background | D: cited in application | O: unwritten disclosure | L: cited for other reason | P: intervening document | &: members of the same family, corresponding document |
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| P: intervening document | &: members of the same family, corresponding document | | | | | | | | | | | | |

APPENDIX TO SEARCH REPORT FOR EUROPEAN PATENT APPLICATION NO.

EP 02 29 0956

This appendix gives the members of the family of patents relating to the patent documents cited in the above-identified search report. These members were contained in the database of the European Patent Office as of 26-06-2002. The information supplied is for information only and the European Patent Office does not incur any liability thereunder.

| Patent Document Cited in Search Report | Publication Date | Member(s) of Patent Family | Publication Date |
|---|------------------|--|--|
| EP 0777312 A | 04-06-1997 | DE 19544830 A1 DE 59606820 D1 EP 0777312 A2 US 5828147 A | 05-06-1997 31-05-2001 04-06-1997 27-10-1998 |
| EP 1050948 A | 08-11-2000 | DE 19920127 A1 EP 1050948 A2 JP 20000333418 A US 6369473 B1 | 16-11-2000 08-11-2000 30-11-2000 09-04-2002 |
| DE 700420 C | 19-12-1940 | NONE | |
| JP 10126990 A | 15-05-1998 | NONE | |
| EP 0872943 A | 21-10-1998 | EP 0872943 A1 JP 11004553 A TW 380329 B US 6335582 B1 | 21-10-1998 06-01-1999 21-01-2000 01-01-2002 |

REPUBLIC OF FRANCE

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SEARCH REPORT

prepared on the basis of the latest
claims filed before the search was started

National Registration No.:

FA 601597
FR 0105190

| DOCUMENTS CONSIDERED PERTINENT | | Claims concerned of the examined application | |
|---------------------------------|---|---|---|
| Category | Documents cited stating pertinent parts where necessary | | |
| X | US 5 864 192 A (ISHIGURO AKIYOSHI ET AL) 26 January 1999 (1999-01-26) | 1,5-7 | H02K11/00 H02K1/14 H02K21/16 |
| Y | *abstract; figure 22* | 2,3,8 11,12 | |
| X | EP 1 010 660 A (MITSUBISHI ELECTRIC CORP) 21 June 2000 (2000-06-21) | 1,5,7 | |
| A | *paragraph 0040!-paragraph '0041!; figure 4 * | 2 | Search Classes (Int. Cl. 7) |
| Y | PATENT ABSTRACTS OF JAPAN Vol. 1995, no. 07, 31 August 1995 (1995-08-31) -&JP 07 107707 A (SHIBAURA ENG WORKS CO LTD), 21 April 1995 (1995-04-21) *abstract; figure 1* | 2,3,8 | H02K |
| Y | EP 0 438 594 A (FANUC LTD) 31 July 1991 (1991-07-31) * column 3, line 20-line 22; figure 4 * | 11,12 | |
| A | US 4 617 725 A (HOLTER WARREN G ET AL) 21 October 1986 (1986-10-21) *column 2, line 31-line 48; figure 1 * | 9 | |
| Date of Search: 25 January 2002 | | Examiner: Contreras Sampayo, J | |
| CATEGORIES OF DOCUMENTS CITED | | | |
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| Y: | particularly pertinent in combination with another document in the same category | E: | patent document benefiting from a date prior to the filing date which was not published until this filing date or a subsequent date |
| A: | pertinent to at least one claim or general technological background | D: | cited in application |
| O: | unwritten disclosure | L: | cited for other reason |
| P: | intervening document | &: | members of the same family, corresponding document |

APPENDIX TO SEARCH REPORT FOR FRENCH PATENT APPLICATION NO.

FR 0105190
FA 601597

This appendix gives the members of the family of patents relating to the patent documents cited in the above-identified search report. These members were contained in the database of the European Patent Office as of 25 January 2002. The information supplied is for information only and neither the European Patent Office nor the French Government incurs any liability thereunder.

| Patent Document Cited in Search Report | Publication Date | Member(s) of Patent Family | Publication Date |
|---|------------------|---|--|
| US 5864192 A | 26-01-1999 | CA 2139584 A1 CN 1085695 A, B CN 1147718 A, B DE 69331195 D1 EP 0650246 A1 WO 9401920 A1 JP 2699655 B2 SG 52509 A1 | 20-01-1994 20-04-1994 16-04-1997 03-01-2002 26-04-1995 20-01-1994 19-01-1998 28-09-1998 |
| EP 1010660 A | 21-06-2000 | WO 9841467 A1 EP 1010660 A1 US 6328136 B1 | 24-09-1998 21-06-2000 11-12-2001 |
| JP 07107707 A | 21-04-1995 | NONE | |
| EP 0438594 A | 31-07-1991 | JP 3032333 A DE 69015606 D1 DE 69015606 T2 EP 0438594 A1 WO 9100638 A1 US 5157297 A | 12-02-1991 09-02-1995 24-08-1995 31-07-1991 10-01-1991 20-10-1992 |
| US 4617725 A | 21-10-1986 | NONE | |

EUROPEAN PATENT OFFICE

Application No.:

EUROPEAN SEARCH REPORT

EP 02 29 0952

| DOCUMENTS CONSIDERED PERTINENT | | | |
|---|---|--|--|
| Category | Documents cited stating pertinent parts where necessary | Claims concerned of the examined application | Classification of the application (Int. Cl. 7) |
| X | GB 258 981 A (BRITISH LIGHTING AND IGNITION; JAMES COCHRANE HUTTON) 7 October 1926 (1926-10-07) | 1,4,9, 13,14 | H02K1/14 H02K1/18 H02K11/00 |
| Y | *page 1, line 25-line 37* | 2,3,5-8, 11,12 | |
| A | *page 1, line 46-line 50* *page 1, line 58* *page 1, line 74-line 79* *page 2, line 49-line 72; figure 1* | 10 | |
| Y | US 5 729 072 A (KIKUCHI SEIJI ET AL) 17 March 1998 (1998-03-17) *column 4, line 48-line 60* *column 6, line 25-line 28; figure 2* | 2,3 | |
| Y | DE 700 420 C (SIEMENS) 21 November 1940 (1940-11-21) *figure 2* | 5,6 | |
| Y | EP 0 872 943 A (JAPAN SERVO) 21 October 1998 (1998-10-21) *abstract; figure 2* | 7,8,11 12 | |
| A | PATENT ABSTRACTS OF JAPAN Vol. 1995, no. 07, 31 August 1995 (1995-08-31) -& JP 07 107707 A (SHIBAURA ENG WORKS CO LTD), 21 April 1995 (1995-04-21) *abstract; figures 1, 2* | 10 | Search Classes (Int. Cl. 7) H02K |
| A | EP 0 909 009 A (SINANO ELECTRIC ;MITSUBISHI HEAVY IND LTD (JP)) 14 April 1999 (1999-04-14) *paragraphs '0038!', '0040!* | 13 | |
| The present search report is established for all claims | | | |
| Place of Search | | Date of Search | Examiner |
| La Haye | | 25 June 2002 | Contreras Sampayo, J |
| CATEGORIES OF DOCUMENTS CITED | | | |
| X: particularly pertinent by itself | | T: theory or principle at the basis of the invention | |
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| O: unwritten disclosure | | L: cited for other reason | |
| P: intervening document | | &: members of the same family, corresponding document | |

EUROPEAN PATENT OFFICE

Application No.:

EUROPEAN SEARCH REPORT

EP 02 29 0952

| DOCUMENTS CONSIDERED PERTINENT | | | |
|---|--|--|--|
| Category | Documents cited stating pertinent parts where necessary | Claims concerned of the examined application | Classification of the application (Int. Cl. 7) |
| A | US 5 838 086 A (CUENOT ALAIN ET AL) 17 November 1998 (1998-11-17) *column 1, line 65- line 67* | 14 | |
| | | | Search Classes (Int. Cl. 7) |
| | | | H02K |
| The present search report is established for all claims | | | |
| Place of Search | Date of Search | Examiner | |
| La Haye | 25 June 2002 | Contreras Sampayo, J | |
| CATEGORIES OF DOCUMENTS CITED | | | |
| X: particularly pertinent by itself | T: theory or principle at the basis of the invention | | |
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| A: pertinent to at least one claim or general technological background | D: cited in application | | |
| O: unwritten disclosure | L: cited for other reason | | |
| P: intervening document | &: members of the same family, corresponding document | | |

APPENDIX TO SEARCH REPORT FOR EUROPEAN PATENT APPLICATION NO.

EP 02 29 0952

This appendix gives the members of the family of patents relating to the patent documents cited in the above-identified search report. These members were contained in the database of the European Patent Office as of 25 June 2002. The information supplied is for information only and the European Patent Office does not incur any liability thereunder.

| Patent Document Cited in Search Report | Publication Date | Member(s) of Patent Family | Publication Date |
|---|------------------|---|--|
| GB 258981 A | 07-10-1926 | NONE | |
| US 5729072 A | 17-03-1998 | JP 6105487 A | 15-04-1994 |
| DE 700420 C | 19-12-1940 | NONE | |
| EP 0872943 A | 21-10-1998 | EP 0872943 A1 JP 11004553 A TW 380329 B US 6335582 B1 | 21-10-1998 06-01-1999 21-01-2000 01-01-2002 |
| JP 07107707 A | 21-04-1995 | NONE | |
| EP 0909009 A | 14-04-1999 | JP 11098791 A CN 1213882 A,B EP 0909009 A1 TW 417347 B | 09-04-1999 14-04-1999 14-04-1999 01-01-2001 |
| US 5838086 A | 17-11-1998 | FR 2723272 A1 AT 160473 T DE 69501066 D1 DE 69501066 T2 DK 695018 T3 EP 0695018 A1 ES 2109061 T3 GR 3026007 T3 | 02-02-1996 15-12-1997 02-01-1998 12-03-1998 22-12-1997 31-01-1996 01-01-1998 30-04-1998 |

EUROPEAN PATENT OFFICE

EUROPEAN SEARCH REPORT

Application No.:

EP 02 29 0953

| DOCUMENTS CONSIDERED PERTINENT | | | |
|---|--|--|--|
| Category | Documents cited stating pertinent parts where necessary | Claims concerned of the examined application | Classification of the application (Int. Cl. 7) |
| A | US 6 025 665 A (TEVAARWERK JOSEPH ET AL) 15 February 2000 (2000-02-15) *column 10, line 7-line 26; figures 5,9A,11B* | | H02K29/08 H02K3/18 |
| A | US 5 864 192 A (ISHIGURO AKIYOSHI ET AL) 26 January 1999 (1999-01-26) *abstract; figure 22* | 1-3,5-8 11 | |
| A | EP 1 010 660 A (MITSUBISHI ELECTRIC CORP) 21 June 2000 (2000-06-21) *paragraph '0040!-paragraph '0041!; figure 4 * | 1,2,5,7 | |
| A | PATENT ABSTRACTS OF JAPAN Vol. 1995, no. 07 31 August 1995 (1995-08-31) -& JP 07 107707 A (SHIBAURA ENG WORKS CO LTD), 21 April 1995 (1995-04-21) *abstract; figure 1* | 2,3,8 | |
| A | EP 0 438 594 A (FANUC LTD) 31 July 1991 (1991-07-31) *column 3, line 20-line 22; figure 4 * | 11 | |
| A | US 4 617 725 A (HOLTER WARREN G ET AL) 21 October 1986 (1986-10-21) *column 2, line 31-line 48; figure 1 * | 9 | Search Classes (Int. Cl. 7) H02K |
| The present search report is established for all claims | | | |
| Place of Search | | Date of Search | Examiner |
| La Haye | | 26 June 2002 | Contreras Sampayo, J |
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| Y: particularly pertinent in combination with another document in the same category | | E: patent document benefiting from a date prior to the filing date which was not published until this filing date or a subsequent date | |
| A: pertinent to at least one claim or general technological background | | D: cited in application | |
| O: unwritten disclosure | | L: cited for other reason | |
| P: intervening document | | &: members of the same family, corresponding document | |

APPENDIX TO SEARCH REPORT FOR EUROPEAN PATENT APPLICATION NO.

EP 02 29 0953

This appendix gives the members of the family of patents relating to the patent documents cited in the above-identified search report. These members were contained in the database of the European Patent Office as of 26 June 2002. The information supplied is for information only and the European Patent Office does not incur any liability thereunder.

| Patent Document Cited in Search Report | Publication Date | Member(s) of Patent Family | Publication Date |
|---|------------------|---|--|
| US 6025665 A | 15-02-2000 | AU 6278498 A EP 0962042 A2 WO 9837618 A2 | 09-09-1998 08-12-1999 27-08-1998 |
| US 5864192 A | 26-01-1999 | CA 2139584 A1 CN 1085695 A,B CN 1147718 A, B DE 69331195 D1 EP 0650246 A1 WO 9401920 A1 JP 2699655 B2 SG 52509 A1 | 20-01-1994 20-04-1994 16-04-1997 03-01-2002 26-04-1995 20-01-1994 19-01-1998 28-09-1998 |
| EP 1010660 A | 21-06-2000 | CN 1248956 A WO 9841467 A1 US 6349796 B1 EP 1010660 A1 US 6328136 B1 US 2002027047 A1 US 6344089 B1 US 2002027048 A1 | 29-03-2000 24-09-1998 26-02-2002 21-06-2000 11-12-2001 07-03-2002 05-02-2002 07-03-2002 |
| JP 07107707 A | 21-04-1995 | NONE | |
| EP 0438594 A | 31-07-1991 | JP 3032333 A DE 69015606 D1 DE 69015606 T2 EP 0438594 A1 WO 9100638 A1 US 5157297 A | 12-02-1991 09-02-1995 24-08-1995 31-07-1991 10-01-1991 20-10-1992 |
| US 4617725 A | 21-10-1986 | NONE | |

EUROPEAN PATENT OFFICE

EUROPEAN SEARCH REPORT

Application No.:

EP 02 29 0954

| DOCUMENTS CONSIDERED PERTINENT | | | | | | | | | | | | | |
|---|--|--|---|-------------------------------------|--|---|--|--|-------------------------|-------------------------|---------------------------|-------------------------|---|
| Category | Documents cited stating pertinent parts where necessary | Claims concerned of the examined application | Classification of the application (Int. Cl. 7) | | | | | | | | | | |
| Y | PATENT ABSTRACTS OF JAPAN Vol. 010, no. 091 (E-394), 9 April 1986 (1986-04-09) & JP 60 234451 A (SHINKO DENKI KK), 21 November 1985 (1985-11-21) *abstract; figures 2,1* | 1,3-7,9, 12 | B60K7/00 H02K1/14 H02K21/22 H02K7/10 H02K7/14 H02K1/27 | | | | | | | | | | |
| Y | EP 0 669 699 A (FICHTEL & SACHS AG) 30 August 1995 (1995-08-30) *abstract; claims 1,2,10; figure 1 * | 1,3-7,9, 12 | | | | | | | | | | | |
| A | DE 199 03 409 C (SYSTEM ANTRIEBSTECHNIK DRESDEN) 20 July 2000 (2000-07-20) *abstract* *figure* | 8,10,13, 14 | | | | | | | | | | | |
| A | DE 195 03 610 A (ZAJC FRANC ;ZAJC IVICA (SI)) 14 August 1996 (1996-08-14) *column 7, line 28-line 33* *column 7, line 54-line 63* *figure 7* | | | | | | | | | | | | |
| A | PATENT ABSTRACTS OF JAPAN Vol. 2000, no. 14, 5 March 2001 (2001-03-05) -&JP 2000 333407 A (TADA SEIICHI;AKATANI MASAMI), 30 November 2000 (2000-11-30) *abstract; figures 1,2* | | Search Classes (Int. Cl. 7) B60K H02K | | | | | | | | | | |
| The present search report is established for all claims | | | | | | | | | | | | | |
| Place of Search La Haye | | Date of Search 28 June 2002 | Examiner Contreras Sampayo, J | | | | | | | | | | |
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APPENDIX TO SEARCH REPORT FOR EUROPEAN PATENT APPLICATION NO.

EP 02 29 0954

This appendix gives the members of the family of patents relating to the patent documents cited in the above-identified search report.
These members were contained in the database of the European Patent Office as of 28 June 2002
The information supplied is for information only and the European Patent Office does not incur any liability thereunder.

| Patent Document Cited in Search Report | Publication Date | Member(s) of Patent Family | Publication Date |
|---|------------------|--|--|
| JP 60234451 A | 21-11-1985 | NONE | |
| EP 0669699 A | 30-08-1995 | DE 4406471 A1 BR 9404789 A EP 0669699 A1 JP 7264793 A | 21-09-1995 24-10-1995 30-08-1995 13-10-1995 |
| DE 19903409 C | 20-07-2000 | DE 19903409 C1 | 20-07-2000 |
| DE 19503610 A | 14-08-1996 | DE 19503610 A1 JP 8265996 A US 5744888 A | 14-08-1996 11-10-1996 28-04-1998 |
| JP 2000333407 A | 30-11-2000 | NONE | |